

Virginia WILDLIFE

JUNE, 1954



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June Interlude

This picture certainly needs no caption. Commission Photographer Kesteloo catches the spirit of this spin fisherman at the climactic moment of landing a big bass.

Virginia WILDLIFE

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A Monthly Magazine Dedicated to the Conservation, Restoration, and Wise Use of Virginia's Wildlife and Related Natural Resources, and to the Betterment of Hunting and Fishing in Virginia

COMMONWEALTH OF VIRGINIA



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VOLUME XV JUNE, 1954 No. 6

In This Issue

	PAGE
The Story of the Wildlife Refuge Program	4
Improving Farm Woods for Quail	8
Wildlife Essay Contest Winners	10
Mind Your Manners Out of Doors	11
Conservationgram	13
Dragon Swamp is Well Named	14
Live-Trapping Beaver for the Commission	16
Eastern Shore Sport Fishing	18
Back Bay Full of Bass	20
Summer Recreation and Forest Fire	22
The Drumming Log	23
Field Force Notes	24
Wildlife Questions and Answers	26
Common Virginia Turtles	27
Virginia Wading Birds	28

Cover

White-tailed fawn deer appears lost and forlorn, looking for its mother. Chances are parent is only a little ways away. Commission discourages the picking up of fawns as captive deer seldom do very well and only add to Commission's problems.

(National Audubon photo by Moslowski and Goodposter)

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The Story of The Wildlife Refuge Program

Part I

By JAY N. DARLING

former Chief, U. S. Biological Survey

The author, known as "Ding" to his friends, gives us here a glimpse of how big events sometimes shape up in high political spheres. It was through the absence of a set of Senatorial false teeth, and by Ding's persistence under the most frustrating circumstances, that the world's largest system of wildlife refuges finally came into being. In Part II, to appear in our next issue, Ding will tell what happened to the Duck Committee, and will describe the disheartening "cat and mouse game" that preceded the six-million-dollar break-through.

—Editor

TWENTY-ODD YEARS AGO, a succession of dry summers with searing winds, which made the Dust Bowl famous, blew the wild duck population of North America to an all-time low. It was an ill wind that almost blew no one any good, but which eventually did result in a water shortage crisis out of which grew the National Wildlife Refuge Program.

Within those states bordering on Canada, from New York west to the Pacific coast, the waters of thousands of shallow prairie lakes sloughs and marshes—the traditional nesting areas for myriad flocks of migratory waterfowl—were lapped up by the thirsty winds, leaving ruin in their wake for man and wildlife.

By Mid-July the brazen sky over the expanses of dried-up sloughs and marshes was empty of wings. The summer broods of ducklings had perished, and the bereft parent stock, already reduced and rafted on the Canadian lakes, faced a fall journey southward along shrunken watercourses lined with hunters armed with automatic and repeater shotguns, a twenty-bird bag limit, baited blinds and little if any law enforcement of the over-liberal hunting regulations.

The canvasbacks and redheads had been hardest hit, but the green-wing and blue-wing teals, wood ducks, gadwalls, pintails and lesser scaups had suffered such inroads on their numbers in the last few years that their survival was threatened. Even the ubiquitous mallards were disappearing. Another shooting season without replenishment from summer breeding could conceivably bring the total population down to where their natural enemies would finish them off beyond hope of restoration.

Then, as now, the sportsmen's fraternity was as full of misinformation as a Soviet broadcast, and it quarrelled over as many theories for salvation of the ducks as religionists over formulas for getting into Heaven. Some of the brothers were converts to the faith that if we shot all the crows the duck hunters and ducks would inherit the earth. Those who scoffed at the crow shooters thought the members of the U.S. Biological

Survey (now the Fish and Wildlife Service of the Department of the Interior) staff were prejudiced and incompetent and should be shot at sunrise. The Platte River hunters of Nebraska, hearing that the market shooters on the Mississippi River and eastern shore of Maryland were shooting plenty of duck and hauling them to market by the car load, called for more liberal shooting privileges in their territory to even up the score. The nature lovers and Audubon Societies were sure that the chief enemies of the ducks and geese were the men who shot them. Those who were down in Washington trying to get united support for conservation legislation before Congress, wished that there were some way by which the thousand and one conservation leagues, societies, sportsmen's clubs and associations could be made to pull together for the common welfare of natural resources instead of meeting defeat in almost every encounter with organized exploitation.

Through several changing administrations, our nation's timorous chief executives, caught in the jam between the boisterous demands of duck hunters crying for more liberal shooting privileges and the pallid recommendations of the Biological Survey for more rigid restrictions, had hid their heads in the sand and done nothing. Congress, equally confused by the conflicting demands, had introduced numerous bills, by request, in the name of wildlife conservation and then, terrified by the scorn of the hunting fraternity and the one-eyed pilots of the sporting supplies industry, had allowed the legislative measures to be buried in the dusty pigeonholes of Congressional committees.

Even when the spectre of extinction became visible to the most callous and hungry duck shooter, a stupid (or vindictive, I never knew which) political hierarchy in Washington of the middle 1930's set up a roadblock against the last possible rescue mission to aid the migratory waterfowl before another barren nesting season, then almost upon us.

It seems strange now, looking back, that the trail to a national wildlife nesting program should have

been strewn with the bleaching skeletons of so many well-meaning efforts and strangled hopes. Stacked up in Washington like a log jam of impressive proportions were plans and specifications for restoration projects large and small. Unrecognized and unnamed among these neglected plans were the ingredients of a National Wildlife Refuge Program.

Credits have been widely distributed for the inspiration and final emergence of the National Wildlife Refuge Program out of chaos—and justly so, for many good men and organized conservation groups have played roles in its dramatic development at one time or another—but no one, to my knowledge, has ever pointed to the false teeth of the late Senator Peter Norbeck of South Dakota (or rather, the absence of them) as a major factor, without which the whole emergency program seemed decidedly destined to crash in the takeoff.

The kindly Peter Norbeck's long record of wise and conscientious service in the Senate had earned him the respect and affection of all his associates, both Republican and Democratic. Every member of the Senate knew of his failing health and of his unfailing devotion to wildlife conservation, which was backed up by a scientific knowledge of factual data. No one questioned the virtue of any conservation measure which he might propose. The full-voiced and unanimous consent of every Senator present was a personal tribute to the Senator.

No one suspected that the resolution which he presented took \$6,000,000 from any unexpended balance left over from the previous year's relief funds and made it immediately available to the emergency duck rescue program.

With the Norbeck resolution affixed, the duck stamp bill was properly documented and rushed by special messenger to the White House for the President's signature.

President Franklin D. Roosevelt was scheduled to leave the next morning for one of his periodic fishing trips, and he had been requested to be on the lookout for the duck stamp legislation and sign it before leaving Washington. It was going to be a race against time, at best, to get the new stamp designed, printed and distributed for sale to the far corners of the country before the opening of the fall hunting season. F.D.R. must have recognized the bill from its title and signed it almost without looking, and was off on his vacation excursion totally unaware, as was practically everyone else except Senator Norbeck and the Senate Clerks, that his signature had completed the transfer of \$6,000,000 to finance the emergency duck restoration program, a project with which the President had been playing a "cat and mouse" game, and to which all the administration brass hats had been giving the well-known Washington run-around for weeks. The fireworks display of invectives with which F.D.R.



The birds faced a fall journey along the shrunken water courses lined with hunters, a 20-bird bag limit, baited blinds and little, if any, law enforcement.

greeted the six-million-dollar news item some time later completed the evidence, which had been long accumulating, that his professed interest in the wildlife program was a good deal less than met the eye.

The subtraction of \$6,000,000 out of unexpended relief funds of the previous year's relief billions imposed no real hardship on any of the relief agencies. A new six-billion-dollar appropriation was already on the way, to carry on their work for another year.

Those whose business it was to check on the expenditures knew that there had been a large surplus of leftover funds which each one of the relief administrators was sitting on, and in some cases they didn't even know it. Nevertheless, the names which the spenders of relief billions called Senator Norbeck and all who were suspected of being associated with him in what they called this "conspiracy to defraud the U.S. Government" were only limited by their imaginations.

Harry Hopkins, who was first to learn of the Norbeck draft, made haste to get his WPA money under wraps—I should add, without warning his associates. He had little to say out loud. F.D.R. was less reserved, but it remained for the late Secretary Harold Ickes to think up the most picturesque vocabulary when he discovered that the six million was to come out of his downy cushion of PWA surpluses. Such language!

For some time I harbored the suspicion that the

late Senators Pittman and McNary, and possibly Carl Shoemaker, Secretary of the Senate Wildlife Committee, and all ardent conservationists, had shared in the plan which Norbeck had carried out. But from all they or anyone else was willing to confess, Mr. Norbeck had acted on the spur of the moment, had scribbled the resolution in pencil, and had showed it to no one.

With these funds made available, long pent-up energies were released with explosive speed. Detailed engineering plans and specifications for the reflooding of some of the artificially drained lakes and duck marshes, which had been idled for want of funds, suddenly blossomed into activity.

We never saw any of the several million dollars for which the WPA and other relief agencies now claim credit as contributors to the National Wildlife Refuge Program. If their figures include the cost of several hundred earthen dams in several western states, particularly South Dakota, their charges are much too extravagant. The dams were badly engineered, carelessly built, and washed out like so much sugar with the first spring freshets. All the efforts of our hydraulic engineers and refuge planners to participate in the planning of the WPA dam projects, or advise them on dam construction methods, were rudely disregarded.

"Them as has gits" was never more clearly proved. The word of the emergency restoration project's good fortune hardly had time to circulate before Gus Silcox, Chief of the Forest Service, and Chris Ratchford, Division Chief of that Service's Wildlife Section, dropped in to offer any of the forestry facilities for which the restoration program might find use. The administrator of the Civilian Conservation Corps telephoned that there were several CCC camps available in the region of our operations whenever we were ready to use them. Resettlement came to our aid in removal and relocation of farmers on some of the distressed areas and even Harry Hopkins' leaf-rakers lent us a hand here and there where there were no leaves to rake. A stranger walked into the head office and threw a \$2,500 check on the desk signed by a civilian whose name was frequently in the news. It was the "kitty" from the previous night's poker game, which had been dedicated to the duck restoration program. The ogre in charge of the Agriculture Department's Accounting Division, who had been making unpleasant noises and ominous glowering over our bureau's near deficit, became a jovial collaborator, and Agriculture Department employees began speaking to the members of the Biological Survey as they passed in the corridors.

And that's the way the little girl who was to grow up and become the mother of the National Wildlife Refuge Program began to toddle and cut her first teeth. That she had survived the long and painful prenatal vicissitudes was a miracle. The late Fanny Brice once described the recent birth of her baby daughter as "like pushing a piano through a transom." The delivery of the emergency duck restoration project



An extended system of waterfowl refuges is urgently needed if North America's ducks and geese are to survive.

seemed even more difficult by comparison. Our problem had been to push a grand piano through a plugged hole in a Roosevelt dime. I should know, for I had been drafted as day and night nurse, midwife and baby sitter throughout the confinement, and had almost lost hope of saving the patient or child until the Caesarean operation performed by old Doc Norbeck.

To us small fry watching the battle of the giants from the sidelines, who had followed closely the prelude of broken promises and disillusionments leading up to the six-million-dollar break-through, there was narcotic enough to ease the most sensitive conscience in a letter which Senator Norbeck used to pull from his pocket and, with a rippling chuckle which shook his massive shoulders, say:—"Val, hey tol' Yay Darling he mus' get the money from Congress didn' 'e?"

If the reader has come this far, I hope he will have the patience to trail along through the story of the origin of that letter and incidents which led up to it. Without the rest of the story you will never know how one of the great humanitarian's practical jokes backfired and, as a result, the uninvited guest, the National Wildlife Refuge Program, crashed the gate and became the life of the party.

Now let us take what the movies call a "flashback" to the beginning of things.

As I have said, it had been one of those periodic drought cycles that had struck across our country, bringing disaster and death to wildlife and hardship and bankruptcy to farmers. As one dry year after another reduced the duck nesting marshes and food waterfowl, the size of migratory flock on their fall and spring flights dropped from thousands to dozens.

Once more they were decoyed into their old habitats to set up housekeeping. But the water lasted only long enough to entice the travelers into the trap and then dried up before the newly hatched ducklings could take wing. By mid-summer, everywhere one went among the old eradling duck marshes and dried-up sloughs, the dry and cracked mud bottoms were splotted with thousands of clusters of little yellow legs, and here and there a few wisps of fuzzy down, clinging to the immature skeletons, fluttered in the hot winds to remind one of the tragedy that had overtaken the season's reproduction.

The same drought cycle was also responsible for the spread of botulism, "duck sickness," which had now appeared in the waters of some of our larger lakes, grown stagnant from evaporation and foul with decaying vegetation. Concentration of alkaline salts in some of the shallower lake-beds turned them into poison, where mature ducks in search of fresh water dropped in for a drink and perished, not by the hundreds but by the hundreds of thousands. The climax had come with the opening of the hunting season of 1934. Duck hunters sitting in their blinds along all the major flyways gazed into almost empty skies. From the Mississippi Valley, the Missouri and Platte River bottoms, the Rio Grande, the California coastal flyways, the



A typical scene in any waterfowl refuge today.

Great Lakes, and up and down the eastern seaboard there arose a melancholy chorus of wails: "The ducks are gone!" This was not the first year of frightening shortages—it was just the worst!

Scientists trained in the interpretation of nature's laws shouted from the housetops the prognosis of a continent without waterfowl. William T. Hornaday, surely a prophet without honor in his own country and the unheeded forewarner of doom, watched with a heavy heart his earlier predictions come true. Banquet audiences gave generous applause to the exhortation of conservation evangelists. The ghosts of extinct passenger pigeons and the bleached bones of the buffalo were nightly materialized in conservation seances from coast to coast to give testimony to the dangers that threatened the ducks.

Congressional mails began to be congested with letters and petitions. Delegations from gun clubs, bird watcher societies and state conservation commissions called upon their Congressmen and were ushered into the presence of the President of the U. S. A.

Among the White House callers at this juncture came Joseph P. Knapp, owner of Crowell Publishing Company, of wide approach to public opinion through its magazines. Knapp had a vibrant voice which rattled the windows when he pulled out the tremolo stops and rumbled on the diapason. His visit was given no publicity, but immediately thereafter there came an announcement from the White House that the President was going to appoint a committee of three to examine the facts, study the many conflicting angles and recommend a procedure calculated to restore the wild duck and goose population. (The announcement did not include the statement that it would also take the heat off the administration, but it seemed generally understood that this was one of the objectives.) In the press release covering the Duck Committee appointments, "a White House spokesman" assured the committee members that if their report was approved, \$1,000,000 of relief funds would be available for carrying out its provisions.

When the names of the committee members were announced, it must have seemed to the sportsmen, as well as to the trained scientists and natural history techni-

(Continued on page 22)

Improving Farm Woods for Quail and other wildlife

By H. J. TUTTLE
District Game Biologist



Woodland clearings such as this half-acre plot add to the production of quail and improved hunting.

IT IS rather disheartening to hear the quail hunter's complaint—though a just one—that quail are plentiful but that too often they inhabit the woodlands rather than the open fields where the sport of hunting can be enjoyed.

This condition cannot be denied. It has been brought about during recent years through changes in agricultural practices which have robbed the fields of their holding potentials for wildlife, particularly quail. Much has been done to correct this situation: recommended soil conservation and land use practices, the utilization of submarginal lands for wildlife to provide food and cover, the establishment of hedgerows of bicolor along field borders, fence rows of bicolor or multiflora rose, the seeding of annuals in odd corners and idle fields, and other recommended land use practices. The importance of these cannot be over emphasized. Yet these alone too often fail to provide the maximum requirement for better hunting. If quail prefer to frequent the woodlands, then we must manage the woodland as well as the cropland for better hunting. After all, many species of wildlife are woods dwellers and these inhabitants could also benefit from a careful plan designed to improve hunting for quail.

When woodland improvements are in order, first consideration should be given to those areas already in existence. Many woodlots already have small clearings made by pulpwood cutting, tobacco beds, cuttings for fire wood or other farm use, clearings for sawmill sites, logging roads, telephone and power line right-of-ways, etc. The size of the planting need not necessarily cover the entire cleared area, but may be desirable as a means of maintaining the area for wildlife and preventing the re-establishment of trees on the area. If located in cutover areas, or open stands of trees, clear-

ings of one-eighth acre or smaller will often afford excellent shooting.

In thick stands of timber, clearings of three-quarters to one acre or larger, are preferable. This affords better shots before the birds reach the woods from a covey rise, where normally it is difficult to get single shots. Abandoned logging roads often afford excellent opportunities for development. They may be maintained as access roads to clearings and serve as fire breaks in case of fire. The same holds true for telephone and power line right-of-ways.

The method of treatment of woodland clearings cannot be specifically defined but will depend to some extent on the size and shape of the area. Generally speaking, areas of one-quarter acre or smaller should



Clearings should be seeded to a good mixture of wildlife foods if they are to be of any value.

be seeded to an annual mixture of seed on a well prepared seed bed and this done at any time after May 1 and before June 15. Or, using the same seeding dates, one might seed one-half of the clearing as a permanent seeding of sericea and the remaining portion to annuals. If the annual mixture contains annual lespedeza, reseeding every two years should be sufficient. It may be desirable to mow or disk the sericea in the early spring of the third or fourth year and every third or fourth year thereafter. As woody plants begin to appear more frequent mowings would be desirable. The treatment of telephone and power line right-of-ways vary depending on the length. Short sections may be seeded and treated similarly to small clearings referred to above. Longer sections can be broken down into small sections and seeded to various crops, such as game bird mixture, milo, sericea and ladino clover. Such a combination provides food for many species of wildlife, particularly quail, rabbits, turkeys and deer. It also aids in the maintenance of the right-of-way.

On larger woods clearings the pattern of treatment varies. Generally the treatment should involve seeding into three sections. A 15-foot strip of bicolor should be seeded through the center of the clearing, preferably in rows two to two and a half feet apart, and at the rate of 8-10 pounds per acre. If equipment for row seeding is not available, the broadcast method is acceptable. The rate of seeding, however, should be increased to

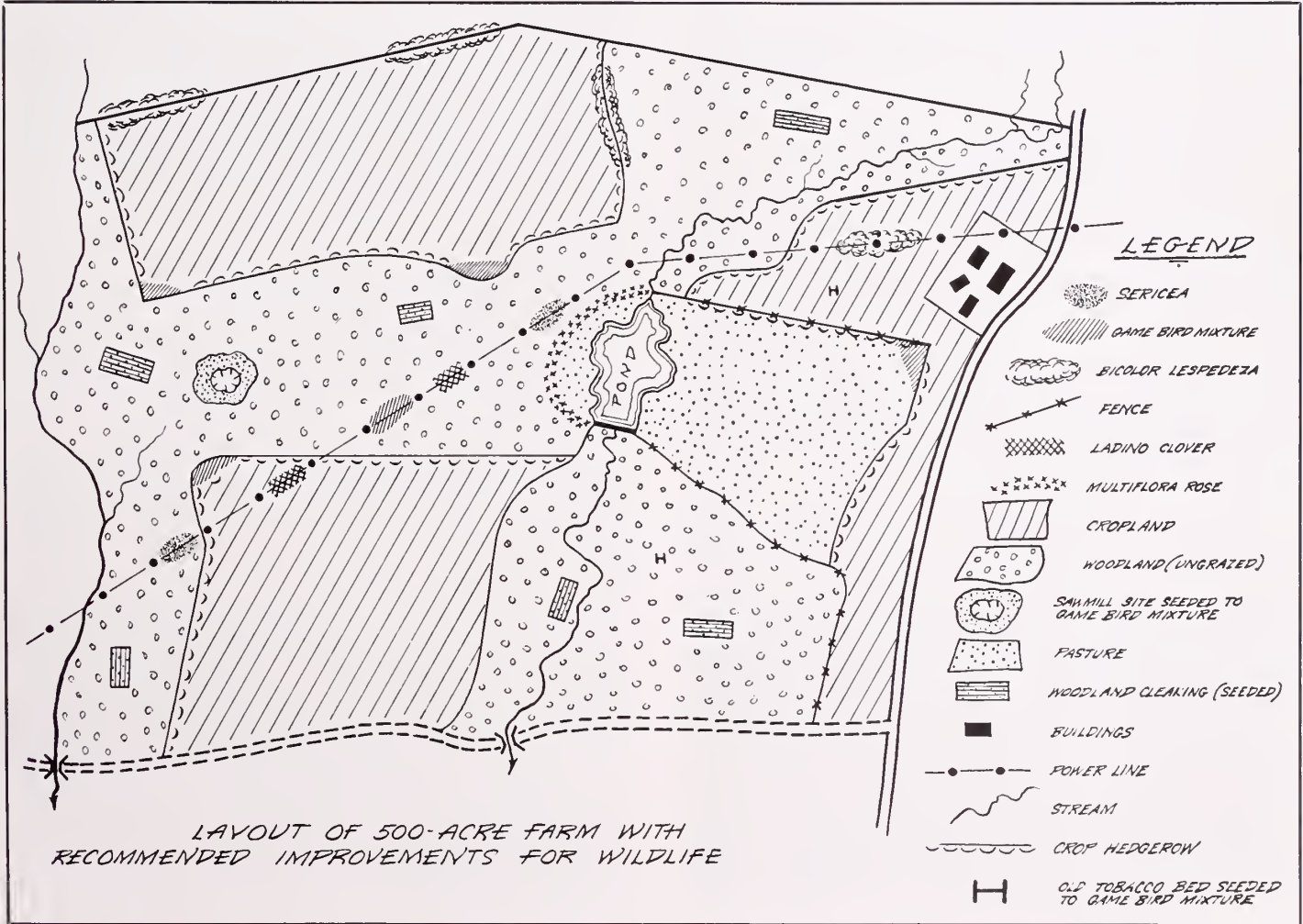
16-18 pounds per acre. Seeding in all cases should be on a well prepared seed bed between May 1 and June 15. Strips of sericea may be seeded at the rate of 25 pounds per acre on either of both sides of the bicolor. Other parts of the field may be seeded to ladino clover and/or game bird mixture or milo. Mowing or disking of bicolor and sericea periodically is a recommended method of maintenance.

In all cases the treated woodlands should be protected from fire and grazing. Grazing woodlots is poor land management and if allowed will destroy valuable food plants: mast, a source of food for many species. Also ground cover will be destroyed and land erosion will be accelerated.

The frequency of clearings is not definitely established. Experience indicates that one clearing to each 40 acres is sufficient. Should circumstances necessitate a wider spacing, the same practices can be followed, giving proportionate benefits. Obviously, the closer spaced clearings provide a more even distribution of game throughout the farm woodland which results in better hunting. Clearings should be connected by access roads or trails, allowing the hunter to move from one to the other with ease, and the trails kept open with equipment that is used in making seedings and doing maintenance.

These practices are not entirely new, but on the contrary have been used with astonishing results. For example, a Middlesex County farm of approxi-

(Continued on Page 25)



SEVENTH ANNUAL WILDLIFE ESSAY CONTEST WINNERS

The Virginia Division of the Izaak Walton League and the Commission of Game and Inland Fisheries have announced the 56 winners who received cash awards totalling \$1000. in the seventh annual Wildlife Essay Contest, co-sponsored by those organizations. The contest is a conservation education project which has been held every year since 1947 and the many thousand essays this year came from students in 82 counties and cities of Virginia.

Governor Thomas B. Stanley, at ceremonies in the Capitol at Richmond on May 5, presented \$50. grand prizes to the following eight students in grades 5 to 12 respectively: Lonnie Lee Smith, Ridgeway Elementary School, Henry County; Judith Nicholas, Hilton School, Warwick; Patty Davis, Colonial High School, Botetourt County; Benjamin Hawkes, Blackstone High School, Nottoway County; Russell Pennington, Rocky Gap High School, Bland County; Edward Casper, Oak Grove High School, Westmoreland County; Jimmy Carlton Nunn, Halifax County High School, Halifax County; and Betty Jane Riddle, Climax High School, Pittsylvania County.

Eight second prizes of \$25. each went to Oliver Winston Akins, Disputanta Elementary School, Prince George County; David Glemming, Simonsdale School, Portsmouth; Charyl DeHart, Alexander Park School, Norfolk; Norma Jean Goodwin, Jeter School, Alleghany County; Clarence Wallace, Spottswood School, Augusta County; Virginia Gray Powell, Bedford High School, Bedford; Margaret Morgan, Oak Grove High School, Westmoreland County; and Charles Damewood, Andrew Lewis High School, Roanoke County.

Third place awards of \$15. each were presented to Carole Jean Miller, Battlefield Park High School, Hanover County; Alice Frazier Boyd, Jeter Junior Elementary School, Alleghany County; Marcia Barlow, Disputanta School, Prince George County; Helen B. Walker, Maury High School, Norfolk; Barbara Bolling, Central High School, Goochland County; Harvey H. Gregory, II, Booker T. Washington High School, Norfolk; William B. Timberlake, Washington Henry High School, Hanover County; and Ella Carter, Montvale High School, Bedford County.

The sixteen who received the \$10. honorable mention awards were Renee Barger, Wilson-Jackson School, Waynesboro; John C. Gibson, Fishersville Elementary School, Augusta County; Jeffrey Randolph Wampler, Harrisonburg High School, Harrisonburg; Jeanne Arnett, Alexander Park Junior High School, Portsmouth; William James Lawrence, Lee Junior High School, Roanoke; Madeline Peebles, Wakefield High School, Sussex County; Bobby Newberry, Bland High School, Bland County; Billy Helmick, Harrisonburg High School, Harrisonburg; Danny Wertz, Andrew Lewis High School, Roanoke County; Nancy Kate Givens, Newport High School, Giles County; Joyce Simpson, Churchland High

School, Norfolk County; James Hinds, Fairfax High School, Alexandria; Dixie Glass, Parry McCluer High School, Rockbridge County; Ray Langhorne, Fairfax High School, Fairfax County; William Towler, Halifax County High School, Halifax County; and James E. Pittman, Jr., Wakefield High School, Sussex County.

Sixteen other special mention prizes of \$5. each were awarded to the following: Louis Flanagan, Tappahannock High School, Essex County; Judy Lane Jones, South Brunswick Elementary School, Brunswick County; Kendall Smith, Orange Elementary School, Orange County; Alice Yeaman, Martinsville Junior High School, Martinsville; Tommy Hunt, Oak Grove High School, Westmoreland County; Carl Hagen, Chesterbrook School, Fairfax County; Wiley Cox, Ceres High School, Bland County; Mary Lee Barnes, Kenbridge High School, Lunenburg County; James E. Hobbs, Dryden High School, Lee County; William Efird, Norview High School, Norfolk; Stanley Bunch, Kempsville School, Princess Anne County; Jimmy Showalter, Lane High School, Albemarle County; May Sue Reese, Wakefield High School, Sussex County; Floyd William Jackson, Regional High School, Prince William County; Charles Humphries, Brownsburg High School, Rockbridge County; and Bill Perry, Oceana High School, Princess Anne County.

The \$40. cash school participation prize was divided this year between two schools having 100 per cent of students in eligible grades submitting essays: the Wyliesburg School, Charlotte County, Mrs. Theresa Wallace, Principal, and the Wakefield High School, Sussex County, Homer M. Cline, Jr., Principal.

In addition to the \$1000. cash awards, recognition was given to Virginia students deserving praise for essays of outstanding merit. Beautifully engraved certificates of merit were awarded to some 240 students from every part of the state.

The Game Commission and the Izaak Walton League played host to the grand prize winners in Richmond on May 5th. After the presentation of the awards by Governor Stanley in the Senate Chamber, winners and their parents were taken on a tour of Richmond and several students appeared on a radio program before the luncheon in their honor at the Hotel Richmond. After the luncheon there were short addresses by members of the Commission and I.W.L. followed by a showing of the Commission's new color film, "Bass Waters."

Mind Your Manners Out of Doors

By DOROTHY TROUBETZKOY

Editorial Assistant

HUNTERS, fishermen, picnickers, campers, sightseers—anyone who enjoys the fields, woods, streams and highways of Virginia will find that good outdoor manners pay off in many ways, in tax dollars saved, in better hunting and fishing, in safer driving and in increased beauty of the countryside.

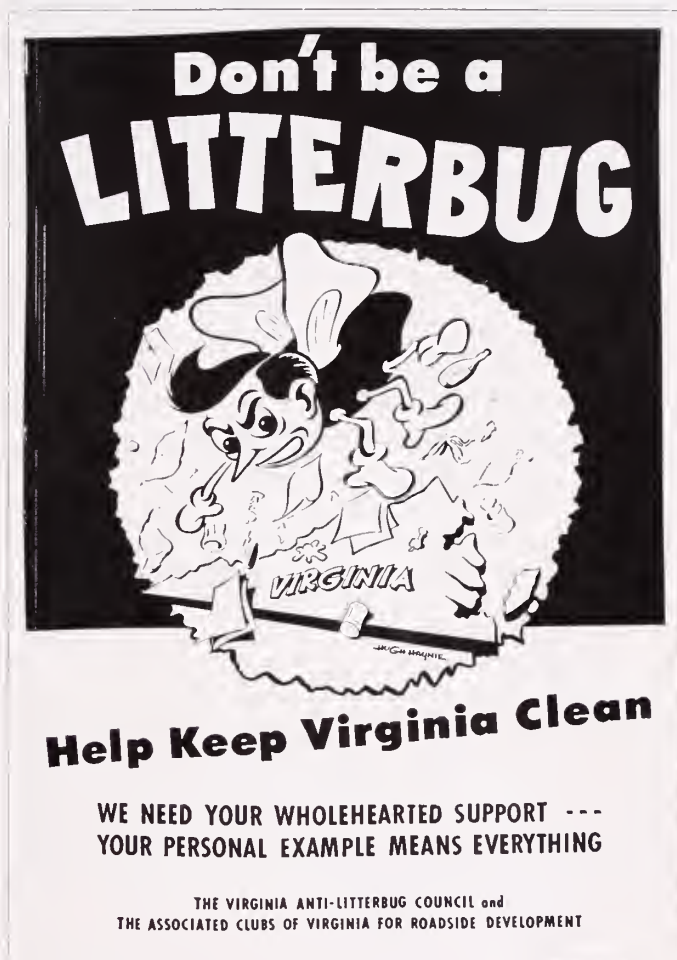
The cigarette tossed in the leaves, the bottle or can dropped overboard, the trash dumped on the bank, the papers littering the roadside, the campfire left smouldering, the broken fence, all these breaches of outdoor etiquette are more effectively within reach of education measures than of the law. Our best bet is to educate the children who are young enough to acquire good outdoor habits painlessly before they have developed bad ones. But education can help many adults too who simply do not realize the expense and damage their seemingly innocent littering can cause, for the total litter from such little things as candy bar and gum wrappers, beer cans, and cigarette packs is quite staggering.

It costs the Virginia Department of Highways \$550,000 a year just to clean up after litterbugs along the state's highways and this comes out of the taxes most of us pay. Even the most confirmed litterbug might wince at that figure and pause before he throws the next wad of paper out of his car window.

Litterbugging is not only an expensive, dangerous and unattractive habit which mars our landscape, but it diverts manpower from more constructive work. For example, every Monday morning the State Highway Department sends out two or three cleanup crews to pick up empty boxes, bottles, beer cans and other trash which week-end drivers have tossed out on the Shirley Highway—and this is just one of the many well-traveled roads. The money and labor could be so much better used to build more roads and recreation areas.

But the more than a half million in tax dollars and the marred landscape, which lessens tourist appeal, are only part of the high cost we pay for thoughtlessness out of doors. There are grave health hazards from loose trash and untended dumps with their likely accompaniment of rats and in certain locations they add to the pollution load of Virginia waters.

Broken bottles and sharp tin are perils to tires and farm animals. Empty bottles tossed into streams endanger fish. The Anti-Litterbug Council reports that



there is a serious loss to farmers from livestock injury of this sort every year.

Forest fires, a large proportion of which are man-made and therefore preventable, destroy wildlife and the habitat of wildlife, damage watersheds, spoil large areas for hunters, fishermen, campers and travelers in general, all of whom by dousing their matches, cigarettes and campfires could cut down the toll tremendously.

The highway roadside program of the Virginia Department of Highways, with its picnic tables and waysides, safe parking areas at 1276 historical markers and scenic places increases the safety and pleasure of driving on Virginia roads.

But every stopping place also increases the concentration of litter, though people are getting better about putting their trash in the cans where they belong, according to Harold J. Neale, landscape engineer of the department. In fact, some people are getting



Roadside dumps destroy landscape beauty and endanger health.
—State Highway Department photo

almost too good about it. Unhappily, in counties where no trash and garbage disposal service is provided, people often cart their accumulated cans and bottles and overload the containers of the nearby parks, waysides and picnic areas.

As if it weren't enough for farmers to have to dispose of their own bottles and cans, if they have allowed hunters and fishermen on their land, they may regret their hospitality when they find that the sportsmen have not been sportsmanlike enough to take care of their own lunch debris, discarded bait containers and other refuse which is unsightly, unsanitary and unnecessary. This should be among the good manners of hunting and fishing on the property of others, along with the etiquette of asking permission, avoiding planted fields, replacing fence rails, not "walking over" wire fences, closing gates, leaving fruit and other crops alone, sharing game and fish, etc.

Sixty percent of Virginians live in urban or suburban areas and it is estimated that the state's highway traffic is over 50 percent recreational. Whether traveling on pleasure or business, motorists benefit from the state's highway roadside program. The plantings on the roadside slopes not only eliminate erosion, but minimize dust and reduce glare. Shade trees also lessen heat and glare. Flowering shrubs and trees add to the landscape appeal. The safe parking areas, picnic tables and waysides are investments not only in recreation but also in safety, since they make possible that rest and relaxation which cuts down the tension and fatigue responsible for many accidents.

In addition to these highway facilities, the nine state parks and various recreational areas administered by the Virginia Department of Conservation and Development, offer statewide holiday and vacation facilities. But approaches to the parks are littered, drinking fountains plugged and spigots knocked off, and initials carved on tables and benches by thoughtless visitors.

The cost of maintaining all these areas for the pleasure, health and safety of so many people is un-

necessarily increased by the thoughtlessness of people who ignore the rather elementary principle of leaving the places they have enjoyed in the condition they would like to find them. Yet signs continue to be shot up and turned around, with sometimes fatal consequences. When the watermelon season comes in, there is no doubt about it, from the rinds buzzing with flies which are left in the parks and at the wayside picnic tables. Additional trash cans along the roads even where there are no picnic tables or play areas have proved quite effective. But there is need for even more systematic measures and more drastic campaigning.

A little over a year ago the Virginia Anti-Litterbug Council was formed to encourage the proper disposal of empty containers and other trash on the many Virginia highways, on the farms and in public places. Under the chairmanship of Earl J. Shiftlet, the 20 members promote cooperation of agencies, businesses and individuals, which finance the project by buying and distributing posters, encourage enforcement of existing anti-dumping laws when educational efforts fail, are developing an extensive educational program through radio, TV, newspapers, and working with local civic and government units.

The main impetus for the Outdoor Advertising Act of 1938 came from the garden clubs. The bill provided for a system of licensing those engaged in the installation of advertising signs. Amendments were made to this act during the recent session of the General Assembly, again largely at the behest of the garden clubs. Mrs. E. A. Sale, highway chairman of the Garden Club of Virginia, writes: "We have done our part in the legislation recently passed by the General Assembly in amending the Outdoor Advertising Act of 1938. This Act also calls for fines up to \$500. for dumping on state highways."

The Associated Clubs of Virginia for Roadside Development is made up of the Garden Club of Virginia, the Virginia Federation of Garden Clubs, the Virginia Federation of Women's Clubs, the Virginia Federation of Home Demonstration Clubs and the Council for the Protection of Roadside Beauty. This represents another group effort to promote good outdoor manners among children, tourists and sportsmen.

As an example of constructive and practical local efforts in this endeavor may be cited the campaign of four Gloucester County clubs,—the Gloucester Woman's Club, the Garden Club, the Ruritans and the Lions—which enlisted the support of 98 percent of the residents of Gloucester in subscription to a garbage removal service. The county clubs also named committees to study the problem of roadside littering after the State Grange, independently of the clubs, had backed a clean-up plan, citing property damage, health hazards, and marring of natural beauty by littered roadsides and untended dumps. Land made available by Myron

(Continued on page 22)

CONSERVATIONGRAM

Late Wildlife News . . . At A Glance

DEER INCREASING WEST OF BLUE RIDGE. Chief of the Game Division C. F. Phelps reports that results of the last hunting season indicate that the deer west of the Blue Ridge are still increasing. The harvest of adult buck deer increased between 1952 and 1953 by about 1000. Since the take of adult bucks represents only 10 percent of the herd, that means the total deer herd jumped during 1953 by 10,000 animals.

GAME COMMISSION PONDS IN PROGRESS. Most of the clearing has been done on the site of the Brunswick County pond and the dam is under construction. The pond will probably be completed by the middle of August. Acquisition of two ponds in Powhatan County has been authorized by the Commission.

SHENANDOAH NATIONAL PARK CLOSED TO FISHING. Because of serious drought and flood conditions, all the waters of Shenandoah National Park, which is under the jurisdiction of the National Park Service, will be closed to fishing during the 1954 season to protect the remaining native species of brook trout which have suffered from a series of severe climatic disasters.

TAX SAVED FOR WILDLIFE WORK. Executive Director I. T. Quinn of the Commission of Game and Inland Fisheries received word from Senator A. Willis Robertson of Virginia that, in the adjustment of the excise tax in the new program before Congress, he has been able to retain the entire 11 percent tax on sporting arms and ammunition which provides funds, under the Pittman-Robertson Act, to be distributed to the several states of the union for wildlife work. The House had cut this by one percent, but the Senate reinstated it.

AWARD PROGRAM ANNOUNCED FOR BOY SCOUT CONSERVATIONISTS. Twelve scouts who make outstanding contributions to the Boy Scout good turn conservation program in 1954 will be selected to receive certificates of National Conservation Achievement during Boy Scout Week in 1955. President Eisenhower, a member of the Boy Scout Executive Board, will make the presentations. All units actively participating in the good turn program will receive a certificate signed by the Secretary of the Interior and the Secretary of Agriculture.

TWENTY-FOUR WHOOPING CRANES MAKE SPRING MIGRATION. Twenty-four whooping cranes, an increase of three over last year's total for this rarest of North American birds, have made their annual spring migration northward from their Texas wintering grounds at Aransas National Wildlife Refuge to Canada's northwest territory.

MARTEN RESTOCKING IN WISCONSIN. The Wisconsin Department of Conservation has secured five marten from Montana for release on Stockton Island in an effort to bring back this animal, one of the rarest and finest of furbearers. Systematically trapped for 300 years before Wisconsin became a state, the last of these arboreal, omnivorous mammals was recorded there in 1925.

FUR FARMING DILEMMA. Currently the fur market is very low and, in contrast, every kind of equipment the fur farmer needs is the highest in history. Stanley Krochmal, head of the New Hampshire Game Department's Powder Mill Fish Hatchery, and fur farmer on the side, reports that some of the finest wild trapped mink, large dark prime pelts have been bringing less than \$15 and exceptionally fine lots of muskrat closed out at \$1 across the board. Most buyers refused to take fox.



To properly see the Dragon Swamp a boat is needed. Here we put in at the Freeport boat landing in the upper Piankitank River. Oran H. Forinholt operates landing and does guide service.



Sibley's boat landing is where the Dragon begins. This is the jurisdictional line between the Commission of Fisheries and the Commission of Game and Inland Fisheries.



The warden examines a raccoon den in a cypress tree. Swamp is alive with 'coon, mink, muskrat, and some other.



Spring is just breaking in the interior of the Dragon Run country. At this point you are completely isolated in the swamp.

DRAGON SWAMP

Little known, wild is Dragon Swamp in Essex Counties. Home game fish, it is one of the most primitive areas in Virginia.

Correctly named a swampy river, this wilderness dear to the sportsmen and outdoorsmen. 100 square miles—rough, throbbing, forbidding.

Here in pictures the land of Gloucester and your *Wildlife* editor goes to the wild Dragon country.

(Commission of Game and Inland Fisheries)

Fishing is good. The Run swarms with pickerel, some yellow perch and broom. In the lower brackish water, bass are plentiful. Still lower, in the Piankitank, rockfish, weakfish, and croaker abound.

Beaver cuttings on the bank of Dragon Run. Trees are Virginia pine, though mammalogists say beaver don't like conifers. Virginia chiseltooths have a taste all their own.





We start up the tortuous, 30-mile long Dragon Run. Just around the bend we spotted a magnificent bald eagle. Big trees are bald cypresses, some going 5 feet in diameter.



One of many quaking islands in the river. Shoreline is treacherous with ooze and mud and death holes. Over the years a number of people have perished in the Dragon.

IS WELL NAMED

accessible only by boat, Middlesex and varied wildlife and few remaining prime Atlantic Seaboard.

Dragon Run, the winding, remains a natural biotic part of all conservation—swamp covers some 64,000 acres—of lush subtropical water-land.

Warden S. R. Stanthams Counties and a show-me-trip into



We move up the narrowing Dragon, scaring droves of turtles off of stumps and logs. Wood ducks were plentiful. Run is a paradise for waterfowlers.



River scenery is of matchless beauty.

(Photos)

That the Dragon marshes can be treacherous is evidenced here. It took us 30 minutes to cover a 100 yards of muskrat marsh at low tide.



Warden Stafford examines muskrat house in the quaking marsh country. Water covers this area at high tide, making area inaccessible by boat or foot.



Live-Trapping Beaver

For the Commission is no Picnic

By MIKE ITTNER

IF YOU ask me about it, this business of live-trapping beaver for the Commission is certainly no picnic—it's work. But it's work that I enjoy and it's more fun than anything else I like to do. Much as I enjoy hunting and fishing, I enjoy the lure of the trapline more.

Let me tell you about some of my operations in Chesterfield County, a few routine experiences, and how by live-trapping excess beaver in the county the Commission is providing needed breeding stock in other counties that need beaver.

I've hunted and fished all of my life and exploits in the woods have given me a close insight into the habits of much wildlife.

For instance, just last month, I had the Commission photographer out on a field trip in the Swift Creek section of Chesterfield and we ran across a live raccoon in a dead tree fast asleep. He was only about 10 feet above the ground in the crotch of a sycamore snag and was completely unaware of us as we came down the creek in a boat. Leon took a few pictures of him and then we tried to move him with a paddle for a better pose. Still asleep, he lost his balance and fell into the creek. Needless to say, he was a terribly fright-

ened and a very much alive 'coon after that. You should have seen that ringtail move!

I've been trapping beaver for the Commission for a number of years and all told now I have about 100 beavers to my credit. Catching the animals in the humane Bailey beaver trap—which takes them alive and unharmed—has brought me a world of experiences. Each morning when I check my traps, it's like an Easter egg hunt: I'm never sure what will turn up.

The beaver is an interesting animal in more ways than one. He's truly an efficient forester and cuts his trees with amazing efficiency. I've seen them tackle a two foot oak tree and do a pretty good job of cutting it down too. And, speaking of engineering, there's a talent for you. No matter how small the leak in a dam may be it gets repaired. Nightly repair jobs on the beaver dam are standard operating procedure with ol' paddletail.

There are well over 50 colonies of beaver in Chesterfield County and the total population, well, my guess is that it closely approaches 500, rather than 300. Plenty of excess and surplus beaver for other areas, if we could only catch 'em.

The biggest trouble I have with beaver is the clogged



A raccoon is spotted in the crotch of a river birch tree. Seconds later he fell out and landed in the creek.



A humanely trapped beaver. This animal will be transplanted to the other sections of the state needing beaver brood stock.



Author inspects beaver dam and Bailey beaver traps. Note the one in hand, which is full of trash.



A beaver lodge in the middle of a 20-acre beaver pond. This lodge has housed a family of beaver for many years.

Dammed-up pond provides excellent pickerel fishing and wood duck habitat. In the fall and winter months flooded swamp area is a favorite hangout of black ducks and mallards.

View across the beaver dam with anglers fishing in the pond. Note yellow poplar cutting in foreground.



up traps. Those confounded beaver have the annoying habit of throwing sticks and mud into the traps without getting caught themselves. Every morning on my inspection trips, I've got to clean out the traps and reset them. It's work.

One old codger of a beaver has been giving me real trouble for a long time and somehow I've got to move him. He's always hiding the trap, burying it in deep water and covering it with leaves. One night he tried to be extra mean and felled a hefty oak right on top of it and bent it to pieces.

Old Paddy or chiseltooth is certainly no piker when it comes to eating habits. Though strictly a vegetarian, he will eat most anything, and his food preferences vary as night and day. In one area he'll pick on willow and yellow poplar; in another it's oak and gum; in still another—yes, hold on, pine. I've seen them work on loblolly pine something fierce. Maybe they like the taste of the pitch in it.

Not so long ago we had trouble around one of Chesterfield's larger beaver ponds. A large beaver house was visited by a family of otters and an eviction notice was served on the legal residents. How the beaver and otter resolved their differences, I don't know, but I do know they fought a lot and made quite a fuss. Everytime I would climb on top of the beaver house and jump up and down I could hear the occupants inside growling. Then there'd be another fight. Sometimes the beaver would come out, sometimes the otter. But they're still in there and apparently just getting along only fair.

Recently at this same pond I noticed an interesting sight. Two big mink were fighting on a beaver lodge out in the pond. I surmised that they were males and were scrapping over some girl friend. Anyway they really put up a wild and noisy battle, leaping and grabbing at each other's throats and trying for a death grip. Finally, one of the combatants rolled loose, made

(Continued on Page 19)

Eastern Shore Sport Fishing

By JOHN GILLET AYRES

IT WAS late afternoon in the early spring of last year and the telephone rang urgently on my office desk. It was a fisherman friend calling. "Can you meet us at the dock in Cape Charles at sunrise in the morning?" he asked. "Sure can if we are going out for black drum," I replied. I was told not to bring any of my fishing gear along as the off-shore cruiser which had been chartered would supply all tackle and bait.

The next morning was chilly and overcast when I arrived at the dock on King's Creek just north of the town limits of Cape Charles. It has been dropping rain and the weather was unsettled as it often is at this season of the year. The sleek sport cruiser *Mahatra* was lying alongside the dock, her diesel turning with assurance and an impatient air. In a few minutes our party was aboard and we cast off for the twenty mile run through the capes out into the ocean and up abreast of Cape Charles light on Smith's Island. It was a rough and disagreeable passage. Each plunge of the cruiser into the oncoming swells covered it with a sheet of cold, salty spray. But why worry? We were going fishing!

The drum had just appeared in small numbers, off the Virginia Coast in their annual run northward. If we were lucky, we would return home with a fish well worth the effort. In about two hours we anchored in a likely spot selected by the guide and captain. Stout hollow glass rods with reels holding two hundred yards of 45 test line were brought from the lockers. Our single hooks were baited with a large bayside clam, secured with rubber bands. The clams were the big brothers to the famed little necks which are featured on the menus of select seafood restaurants.

There were six other cruisers anchored about and their anglers had already got their lines over but were not having much luck. Radio telephone conversations were going on briskly between the guides in an effort to get their parties to the best waters.

But our party was not destined to have much luck that day. My friend was the fortunate one. He succeeded in bringing to gaff one beautiful black drum weighing 68 pounds and another in the 20 pound class. But the rest of us had to start the homeward run empty-handed. We consoled ourselves with the fact that the run of the drum had just begun. There would be other days



Typical scene off Cape Charles on Virginia Eastern shore during the drum fishing season.

in which to hook one of the big gamesters.

Later in the season, off Wachapreague, I got my prize and a broken rod as well. But that is another story too long to tell.

Eastern Shore of Virginia waters offer some of the finest sport fishing to be found anywhere along the Atlantic coast. Such towns as Cape Charles, Quinby, Wachapreague and Chincoteague have gained national reputations and recognition among sportsmen for sport fishing. Five world's records have been made in Cape Charles waters during the last few years. Records for both men and women attest to the size of the fish taken. The world's record black drum was caught from the cruiser mentioned earlier in this story. Others just as large have been hooked but for technical reasons could not qualify for world record rating.

Black drum, channel bass, cobia and the fighting blues are to be had with comparatively little effort and at moderate expense. Trips by charter cruisers to the Gulf Stream, some miles off shore, are a bit more expensive but not unreasonably so. Such trips have been rewarding ones to those deep sea fishermen who have taken them, including the writer. Nice catches of dolphin and albacore are made yearly and marlin are not unknown in the waters off the shore's coastline.

The wide, sandy beaches of the islands, protecting the Eastern Shore from the wild Atlantic offer excellent surf fishing to sportsmen. Channel bass and stripers can be taken from these beaches which, for the most part, are primitive and unspoiled. No roads lead to these islands at present but local boatmen convey sportsmen from the mainland for a small charge. There is no greater thrill in fishing than to take one of these fighting gamesters from the surf.

Chesapeake Bay waters, adjacent to the Eastern Shore, offer a large variety of smaller panfish as well as some of the large game fish. And it is with the small fish that the average fisherman comes in contact. Large catches of spot are not unusual for they run on both the bay and seaside. During the fall of 1952, at Metompkin Inlet, I caught on the sea side enough spot to salt away for winter use, with plenty left over for table use. These little tasty fish are scrappers for their size and fun to catch.

Croakers, mullet and weakfish are present in almost every catch on the bay side and flounder are plentiful on the Atlantic side. The latter are an especial treat for the lovers of white firm meat without many bones. They are delicious either fried or baked.

Every true sportsman should be a conservationist. Whether he be hunter or fisherman, he should know that the future of his chosen sport depends to a great extent on his cooperation toward a sound conservation program.

All too often fishermen are interested solely in the number of fish caught and care little for the size of the fish hooked.

If we are to improve our future as sport fishermen we must sensibly follow conservation practices. This is especially true of our big game fish. I understand that the practice, gaining rapidly in Florida, where many sailfish and tarpon are boated, is to release as soon as caught all such fish unless one is to be mounted as a trophy or is wanted for weighing and record purposes. In this manner the game fish are given a chance to multiply, providing future big game thrills for a long time to come. This seems to me to be a most wise conservation practice. Anyway who would want

more than one of these large game fish hanging on his wall at one time? And since they furnish little food value why carry on the complete destruction of such fighters? The thrill is in hooking and bringing to gaff at the boatside, not in seeing how many one can pile up in the bottom of the boat. *When a fish is killed, the sport is gone.*

Fishing is one of the most helpful of relaxations imaginable, a sport which can be indulged in and enjoyed by rich and poor alike. Expensive gear is not essential. Only a hook, line and sinker are needed and one is in business. Of course this may limit one to fishing off a pier or dock. But this too is fun and if the fish are biting the dockside angler will not come home empty-handed. Young and old alike can enjoy this sport. It requires no great physical exertion and, believe me, the bracing salty air works wonders on a tired mind and body.

So when your cares become too great, close down your desk, get your rod and reel and try the salt water. You'll feel all the better for having done it and the world will seem a much happier place. So let's go fishing, gentle reader, ocean fishing, that is.

LIVE-TRAPPING BEAVER

(Continued from Page 17)

a furious charge and elamped down on the other one's tail. There was an agonizing scream and a leap into the water. One had bettered the other, and, what a sore tail the unfortunate victim must have had.

Beaver ponds make an ideal habitat for ducks and fish. Wood ducks, black ducks and mallards use the wooded ponds a great deal. Pickerel and bream come in rapidly and provide good fishing.

Just recently I noticed quite a commotion in the water near one beaver dam. It was a struggling fish. Soon the struggle ceased and I walked over to see what it was. A sixteen inch pickerel had choked on an oversized bream—the latter still alive, crosswise in its mouth.

I could go on relating experiences like this, on and on. Always there is something new, something exciting to see. All you need to do is be observant, look carefully, be quiet and still. One day I had an owl sit on my head thinking I was a dead stob!

As an inveterate lover of wildlife, I'm glad to see certain forms of animal life increasing. The beaver are coming back. Otters are getting more plentiful for their kind in some places. Raccoons and mink are on the increase, as are opossums and skunks.

The Game Commission is doing a good job of restoring and managing certain forms of wildlife and I'm glad to have a small hand in the restoration program. Someday I'll come back with another article, if the editor will have it. I might tell about some unusual experiences I've had with otters.



W. R. Nicolls (left) and W. B. Anderson with a day's catch of black drum off Cape Charles. Largest fish weighed 55 lbs. Fish were caught from outboard motor.

—Eastern Shore News Photo



Back Bay Full of Bass

By J. J. SHOMON
*Chief, Education Division
 and Editor, Virginia Wildlife*

THOUGH many people might dispute the statement, most fishermen who know Virginia's fabulous Back Bay will agree with the general feeling that this is one of the best bass waters on the Atlantic Coast.

That bass are really plentiful in Back Bay is no secret. A recent fisheries study revealed that there are actually too many fish and that the Bay can stand—yes, hold on better than 90 percent more fishing!

Dr. Dean Rosebery, former Commission fisheries expert, made an extensive survey of Back Bay recently and disclosed that not enough bass were being harvested. His study showed that anglers took out approximately only 7 percent of the legal size bass.

Back in 1951 the bass take in pounds amounted to only 11,086 or only one-half pound of bass per acre of water. This is a very low take for any water and Back Bay's prolific expanse is no "any water." Every effort, Rosebery said, "should be made to increase the harvest of fish." In common language, this means one thing: more fishing.

Many fishermen know about Back Bay yet they seldom go there, or don't go at all because of the unfamiliar surroundings. In an effort to carry out the recommendations of the Rosebery survey, the Commission has attempted to stimulate more interest in Back Bay through articles and general publications and through talks. Reprints and maps on Back Bay are available to anyone who will write to the Commission wanting them.

Briefly speaking, Back Bay is truly a bay, located only 15 miles south of Virginia Beach. It can be reached by Route 615 to Pungo, Pleasant Ridge and the Back Bay Post Office. Any local map of Princess Anne County will reveal the location of the bay area proper and how to get to it.

There are three public landings on the Bay and good fishing may be had in close proximity to these landings. The terminus of Route 659 leads to a good landing at North Bay. There is another at Shipps Bay at the end of Route 627, and still another on Route 669 near the Virginia-Carolina border. Boat livery is to be had at the last two landings and guide service can be had, if arranged in advance, at all three places. A good source of information is the local game warden and the new warden headquarters at the end of Route 622.

From the air, Back Bay appears as an irregular chunk of big water separated from the Atlantic by a narrow barrier reef varying in width from $\frac{1}{4}$ mile to $1\frac{1}{2}$ miles, just sufficient to keep the sea water out. The only direct and major connection with the ocean is Oregon Inlet in North Carolina, some 70 miles to the south. Recently, however, there has been a small break to the ocean 20 miles south of the Virginia-Carolina line. Back Bay however is entirely fresh water with only 5% salinity at the state line in Currituck Sound.

The water area of Back Bay covers 25,000 acres, of which 12,000 acres more or less is Back Bay proper.



Back Bay is an irregular chunk of big water separated from the Atlantic by a narrow barrier reef just sufficient to keep the sea water out.

The U.S. Fish and Wildlife refuge area covers another 12,000 acres and includes the majority of the upper Bay's islands, ponds and marshlands. It is here, in and around the vicinity of the refuge, particularly around the marshy lagoons and ponds, where the best bass fishing is to be had.

Several smaller bays in the upper third of the main Bay are popular with fishermen. Sand Bay east of Ragged Island is productive but you've got to comb the marshy "ponds" closely. During high winds, which are frequent, many anglers retire to the more protected canals and ponds of the Red Head Bay and North Bay. Wind is a frequent problem for the fly caster and when this happens it's good to have other gear on hand to change to. Spinning tackle is ideal.

According to creel census studies, June is the most successful month in which to catch fish. The percentage of fishermen who caught fish decreased from 86 percent in June to 52 percent in October. From June through September most anglers preferred artificial lures, whereas in October the preference ran to live bait.

Generally speaking, Back Bay's fishing follows through on a standard yearly pattern. Winter months are poor. April and May are excellent months with June coming in as the best. Thirty bass on the hook per trip is average for June, according to some guides, with most fish being released. In July and August the fishing drops off although on good days and in good weather it is nothing to pick up a limit of 8 bass.

When going gets extra rough or the fish don't bite,

you can always anchor beside some brush blind on the leeward side and fish minnows, and get fish. Former Governor Battle, an enthusiastic fisherman, and Supervising Game Warden Roland Halstead proved this more than once, catching fish when it seemed impossible to cast or when the fish didn't seem to be doing a thing.

Last summer your humble scribe and photographer Kesteloo spent three days at Back Bay obtaining movie sequences on the picture *Bass Waters*. We ran into one of those periods when even the best of offerings would not tempt a bass. The first day was cloudy and we couldn't take pictures, so we fished. But it was poor fishing and we only took a couple. Next day it was bright and clear but windy. We needed an active fishing scene—with fish. But luck was against us. Despite five hours of the most painstaking effort we never took a decent bass. About 3 o'clock, with the wind up stiff, we quit and came in. Who should meet us but Governor Battle himself—going out!

The story goes that we seemed discouraged and told the governor that it was no use.

"Oh," he said, "we're just going out to one of these blinds and tempt a few minnows—just to relax."

Well, believe it or not, what happened is history. The governor and his small party went out and in two short hours caught their limit of bass!

Well anything can happen at Back Bay and this incident, much to our dismay and sagging fishing reputation, we shall never be able to live down.

Summer Recreation and Forest Fires

By GEORGE DEAN
State Forester

VIRGINIA'S 15,000,000 acres of forested area, ranging from the piney woods and swamp hardwood country in the east, through the pine-hardwood land of the piedmont, to the rugged mountainous terrain in the west, offers a variety of enjoyments to the visitors. Thousands will take Sunday drives to see early and late spring flowers, trees and shrubs in bloom. The rhododendron and mountain laurel should be in full bloom in Goshen Pass when you receive your June copy of *Virginia Wildlife*. Some motorists will depart from the comfort of their cars to hike along some of the numerous trails that are available. Still others will attempt a horseback ride over carefully laid out trails in the state and national parks. What better way to enjoy the mountains with their rocky crags, or the hollows with their deep rushing streams, and verdant slopes. It is by such intimate contact with the beauties and wonders of nature that the visitor appreciates the many interesting things found in the forest.

Aside from the magnificent views, the profuse vegetation that smoothly cloaks Virginia's countryside never fails to charm the recreationist. There are hundreds of different kinds of trees, hundreds of herbaceous wild flowers and a wealth of ferns, mosses, lichens and other plants growing in the woodland. With a good

field guide in one's pocket, many an enjoyable hour can be spent identifying the flora and fauna.

Trout, bass, bream, pickerel and other game fish are to be found in many of Virginia's streams and lakes and an untold number of persons will answer the call of Izaak Walton.

How many native and out of staters will visit the forests and waters of the Commonwealth for summer recreation? The Travel Bureau estimates "millions"! How many visitors will leave death and destruction behind them? The answer to that question will be learned this fall when the foresters close their books on the summer fire season.

The weather experts anticipate a dry summer and this, coupled with the deficit in precipitation for the past two summers, spells DANGER to the forests. Unless every visitor is careful with fire he will destroy the area that provided much pleasure.

Let's all heed the advice of Smokey, the Forest Fire Preventin' Bear— crush all cigarettes into mineral soil or into the ashtray; drown every campfire—Dead Out; break all matches before discarding and be careful with any fire. Memorize the rules and abide by them so that *You Will Not* be the cause of a forest fire.

WILDLIFE REFUGE PROGRAM

(Continued from Page 7)

icians, that probably never had there been appointed a more incongruous group. Thomas H. Beck, editor-in-chief of *Collier's Weekly*, one of Mr. Knapp's publications, who was named chairman, was neither a duck hunter nor a scientist; but he was a violent and outspoken representative of those whose one and only cure for the duck situation was to throw the Biological Survey out of the window, body and britches. Chairman Beck's platform was recognized as a paragraph from Mr. Knapp's rule book. Professor Aldo Leopold, of the University of Wisconsin, the second name on the President's committee was an exception to the unanimous displeasure. He was a recognized authority on environmental control, and an eloquent advocate of the opposite pole from where Tom Beck had planted his standard; but Leopold was also a "professor," and therefore suspected by the snaggle-toothed one-gallus duck hunters as likely to harbor "high falutin'" ideas. And what—many asked—did Ding Darling, a mid-western newspaper cartoonist, know about ducks, for heaven's sake?

(Reprinted through the courtesy of the National Parks Magazine and the author. Part II continued next month.)

MIND YOUR MANNERS

(Continued from Page 12)

Hall, of Gloucester, will provide an area which should be adequate for many years, according to Mrs. James B. Martin, president of the Garden Club and member of the Woman's Club.

If this sort of cooperative program can be extended statewide, it will not only make provision for practical disposal of garbage and trash of other sorts, but will make people aware of the importance of continuing these tidy outdoor habits when they travel away from home.

Undoubtedly the most important single phase of these campaigns to encourage and implement good outdoor manners is education in schools and camps at the ages at which such teaching is most effective, for good habits of any kind developed by children seem to be more indelible and automatic. Of course, the schools and clubs can't do it alone if the grownup environment isn't reached too. But certainly good outdoor manners are indispensable if we are to keep Virginia clean and green and a happy hunting and fishing ground.



ASHLAND BROWNIE TROOP GIVES CONSERVATION PLAY

Mrs. J. Paul McConnell, Leader of Brownie Troop 31, Ashland, Virginia, has sent us a copy of a play "Keep Virginia Green" and a picture of Brownie Troop 31, forming the dogwood blossom while they said the Conservation Pledge.

The Brownie troop gave the play at the Henry Clay School in Ashland and also presented it before the Independence Ruritan Club of Ashland as well as to 100 Girl Scouts and Brownies celebrating their "Girl Scout Birthday."

The one-act play is designed to dramatize problems of forest and wildlife protection, with emphasis on the state flower, dogwood, Virginia's state bird, the cardinal, woodland wild flowers, and forest fire prevention, personified by Smokey the Bear.

SENATOR ROBERTSON RECALLS DOGWOOD BILL

In commenting in a letter on the recent article on the state flower in *Virginia Wildlife*, Senator A. Willis Robertson of Virginia recalls that in 1944 he introduced a bill in the House of Representatives to make the flowering dogwood our national flower. "But there were many who preferred the Wild Rose and others who preferred other wild flowers and there was such a division of opinion that I could get no action on my bill. So far as I know that is the only bill introduced in Congress to designate a National Flower."

The bill introduced by the then Representative Robertson was designed to establish a national holiday

to commemorate those who gave their lives in World War II, national cemeteries in every state and to adopt a national flower, the flowering dogwood which is found in every state, "which in the springtime may be found blooming in all these national cemeteries."



NEW LEAFLETS ON NATIONAL WILDLIFE REFUGES

The U.S. Fish and Wildlife Service, Washington, D.C. has announced publication of a new series of leaflets about national wildlife refuges.

The first of the series, *Visiting Wildlife Refuges*, shows the location of 73 of the most accessible refuges and includes suggestions about the best time for visiting them and for seeing concentrations of birds.

The U.S. government operates a total of 282 national wildlife refuges. Twenty are located in Alaska, Hawaii and Puerto Rico.

NATIONAL FORESTS ATTRACT RECORD NUMBER OF VISITORS

Outdoor recreation on the national forests drew a record number of visitors during 1953, the U. S. Department of Agriculture has announced.

Reports from Forest Service field offices give a total of 35,400,000 visits in '53, an increase of seven percent over visits the previous year and a 97 percent increase since 1941, the highest pre-war year. The estimated 90 million sightseers who drove over forest highways were not counted in that total.

Based on sample counts, there were nearly nine million picnickers, over three million hunters, nearly two million campers, close to two million whose goal was winter sports and over a million who listed swimming as the main purpose of their visits. General enjoyment of the forests was the primary objective of some nine millions. Other visits were made for hiking, riding, canoeing, organization camping, and wilderness travel.

The almost 100 percent increase in the use of camp and picnic ground facilities has caused severe overcrowding in many of the 4,300 national forest camp and picnic areas. Those areas had to be cleaned more often. Table, benches and fireplaces are wearing out and sanitary facilities are overtaxed. Campers and picnickers overflow the designated areas and use land on which no facilities are provided.

To relieve this problem, the Forest Service urges national forest visitors to leave the forest clean and neat for the next comers. That will allow the use of the funds for the repair and upkeep of worthwhile improvements rather than just for picking up paper, cans and trash.



Halifax Sportsmen's Club Sponsors Food and Cover Contest

State game technicians will be the judges of the 1954 food and cover contest sponsored by the Sportsmen's Club of Halifax and open to any citizen of Halifax County, whether landowner or not. It is not necessary to be a member of the sportsmen's Club to enter.

The purpose of the contest is to stimulate the planting of adequate food and cover for game birds in the county, since the future of hunting depends on the provision of sufficient food and cover for wildlife all year 'round. Clean farming operations have eliminated the range of hundreds of coveys of quail in Halifax County and the Sportsmen's Club hopes that its project will reverse the trend and increase quail and turkey hunting.

The contest will be judged on the basis of food and cover plantings made on a farm of not less than 50 acres during the year 1954, and on the amount of wildlife food left standing from farm crops in corners and edges of fields, as follows:

1. Fifty percent on plantings (not less than three) put out on the farm during the year. These may include milo, Wood's mixture, sericea lespedeza or bicolor lespedeza. The seed for all these plantings may be secured from the Game Commission.

2. Fifty percent on strips, corners, or patches (not less than three, but the more the better) of wheat, Korean lespedeza, peas, sorghum, or soybeans, left unharvested by the landowner adjacent to protective cover.

It is pointed out that a mower's width of Korean lespedeza left standing around the edges of a

field will frequently enable a covey of birds to survive the winter.

To secure milo, Wood's mixture, sericea or bicolor lespedeza seed, see game wardens A. E. Cole or Ralph Austin, game technician, C. H. Shaffer, Lynchburg, or W. F. Adams, chairman of the Sportsmen's Club committee.

In addition to supplying seed, the wardens and game technician will help plan plantings and give additional information about the contests, which will be judged in October or November by state game technicians.

First prize is \$75. cash and 10 quail for liberation; second, \$40. and 10 quail; third, \$20. and 10 quail; fourth, \$10. and 6 quail for liberation; fifth, \$5. in cash plus a subscription to **Virginia Wildlife**.

New Izaak Walton Chapter Formed in Suffolk

Game Warden W. Shelton Rountree of Nansemond County reports the formation of a new Izaak Walton League chapter in Suffolk, to be known as the Nansemond Chapter, I.W.L.A.

Among the guests present at the organizational meeting, at the Shrine Club on April 8, were Commissioner Charles D. Andrews of Suffolk, J. J. Shomon, Editor of **Virginia Wildlife**, Jack Stowell, eastern representative of the Izaak Walton League, Art Thompson and other Waltonians from Norfolk who lent a helping hand.

Of the more than 40 present, 28 became paid up members and another 14 pledged to join. Since only 25 were needed, application for a charter has been made and T. Roland Felton and Ray Baird, respectively, will serve as temporary president and vice president.

Store Owner Is Real Conservationist

Herman J. Tuttle, district game biologist, reports exceptional co-operation from storeowner R. T. Marvin of Eltham, Virginia, near West Point.

Mr. Marvin has been very helpful every year in publicizing the Commission's food and cover program and in disseminating information about fishing and hunting places. His store and station also served as a big game checking station.

As an incentive to hunters to tag and record their deer, Mr. Marvin annually awarded sporting goods prizes for hunters, and also for fishermen. Last year the awards were a Remington automatic 12-gauge shotgun for the heaviest buck deer, a 209-pound buck reported at his checking station; a hunting coat for the deer with the largest number of points; a Remington automatic .22 rifle for the deer with the next largest number of points; and a pair of hunting boots for the deer with the next largest number of points.

Mr. Marvin is now moving his place of business to Richmond Road, Williamsburg, across from the open air theatre, where he will conduct a tackle and hobby shop catering exclusively to hunters and fishermen.

Virginian Wins National Big Game Prize

Tom Mace of R.F.D. 2, Staunton, Virginia won third prize for a typical white-tailed deer in the 1953 North American Big Game Competition, sponsored by the Boone and Crockett Club in New York. Mr. Mace's 11-point buck had an inside spread of 21½ inches.

Dip-Netting at Cat Point Creek

Game Warden H. L. France of Richmond County introduced members of the Education Division to the hospitality of a fishing club at Cat Point Creek, near Warsaw, where they went dip-netting for herring last month.

The woods along the shore were weirdly and beautifully lighted by a huge bonfire of discarded tires which, surprisingly, seemed to have none of the characteristic odor of burning rubber—at least to those nearby to whom it would have mattered most. Hot dogs were broiled over an open wood fire nearby.

But the fun really began when the two nets on either side of the stream were manned by patient fishermen waiting hopefully for that tug of the big mesh which meant the hickory shad had blundered in. Then with a jerk the nets went high over the head and spilled silvery slapping fish which seemed to dance, firelight through their translucent fins, for a few minutes before they flopped still.

Though it wasn't the night of a big herring run and the fishermen had to wait for their fish which sometimes swam down the creek quite visibly and then turned short and swam back upstream, there was perhaps more pride and excitement in the fish which were caught by everyone who tried to fish.

V S O Elects New Officers

The Virginia Society of Ornithologists, at its spring meeting in Lynchburg, elected as its new president Jack Perkins, refuge manager of Back Bay Waterfowl Refuge of the U.S. Fish and Wildlife Service.

Other officers named were: vice president, Paul Favour, Luray; secretary, R. J. Watson, Arlington; treasurer, C. C. Stierly, Waverly. Mrs. Colgate W. Darden, Jr., Charlottesville, and W. F. Rountrey, Norfolk, were reappointed chairmen, respectively, of the membership and conservation committees.

F. B. I. Gets Virginian's Goat

Crime detection techniques not only serve to convict the guilty, but also to protect the innocent.

Dr. Henry S. Mosby, Leader of the Virginia Cooperative Wildlife Research Unit, reports that some time ago Game Warden L. O. Alley of Scott County, secured a specimen of meat which he suspected was from a deer illegally killed. The meat specimen was submitted to the Federal Bureau of Investigation for serological tests. The F. B. I. reported that this specimen of meat was not of deer origin and probably had come from a goat. Thus, the scientific examination protected an innocent person from possible prosecution.

Correction on Bass Season Dates

An error occurred in the May issue of *Virginia Wildlife* on page 23. After citing the regulations

which permit year-'round bass fishing in all the public impoundments of the state and in all the public streams east of the Blue Ridge except a few which are regularly stocked with trout, the dates for waters in other categories were given as June 1-March 15. That should have read that for all waters west of the Blue Ridge the bass season is from June 20 to the December 31 following.

Wildlife vs Plate Glass

Game Technician Herman Tuttle reports strange wildlife goings-on in the home of Edwin Turner of West Point.

Mr. Turner was upstairs taking a shower, when he heard a great crash, as if his glass storm door was being broken, as indeed it was. When he got downstairs he found that a bobwhite quail had crashed through the door and was lying dead in his living room.

New Commission Leaflets Available

The first three of the new series of educational leaflets are now available upon request to the Game Commission, J. J. Shomon, chief of the Education Division has announced.

Leaflet number one is devoted to Virginia's state bird, the cardinal and the second is on the Commonwealth's official flower, the dogwood. The third is about the beaver. All are illustrated with line drawings and are designed to fit three-ring 7 x 9 inch looseleaf binders.

IMPROVING FARM WOODS

(Continued from Page 9)

mately 700 acres, mostly woodland, has been developed over a period of years into a quail hunter's paradise for the owner and his friends. Sixteen clearings ranging in size from one-quarter to one acre have been managed for game and by the establishment of food and cover plantings. Proper management has increased the quail population by 400 per cent or from 4 to 16 coveys.

Likewise, a Powhatan County landowner, whose farm is somewhat equal in size has had similar results but under slightly different circumstances. This farm has a vast amount of open land for farming and recom-

mended practices of cropland improvement for game have been followed. In addition to these practices many woodland plantings have been used. Again, the results proved astonishing. The quail population increased in like proportions and an increase in turkeys and rabbits has been evident.

These simple practices which I have related are too often overlooked in the management of our farm game resources. Their value is unquestionable. They should be given every consideration in our efforts to improve conditions for upland game.

Wildlife Questions and Answers

Ques.: What is the oldest living creature in this country?

Ans.: According to James A. Oliver, Curator of reptiles, New York Zoological Park, a box turtle from Hope Valley, Rhode Island, now in the zoo, with strong evidence of authenticity that its age is between 110 and 130 years, is probably the oldest living creature in the country and one of the oldest known animals, exceeded in age only by large land tortoises known to have lived as long as 152 and 177 years.

Ques.: Do moles eat flower bulbs, such as tulips, crocus and hyacinth?

Ans.: The mole is usually unjustly accused when there is evidence of bulbs having been eaten. It likes flower gardens simply because there are more insects and grubs in soft rich earth and doesn't do any more damage to roots than bump its nose against them. However, the pine mouse often follows the mole feasting on the exposed roots and bulbs.

Ques.: There is a regulation that "it is unlawful to take minnows where use of nets is prohibited." Does this apply to inland waters or to trout streams only?

Ans.: This regulation applies both to trout streams and spawning waters above the jurisdictional line of the tide water, with exceptions in certain counties.

Ques.: Are there many kinds of orchids?

Ans.: Orchids belong to one of the largest flower families. According to the National Wildlife Federation, some states have as many as 40 different species.

Ques.: Is it true that a deer can run 40 or 50 miles an hour?

Ans.: Ernest Thompson Seton, in his "Lives of Game Animals" wrote: "... deer can travel at the rate of 25 miles per hour, but cannot keep it up for more than three or four miles."

Ques.: When was the bald eagle adopted as our national emblem?

Ans.: The bald eagle was adopted as our national emblem by an act of Congress on June 29, 1782.

Ques.: What is the largest rodent?

Ans.: The capybara of South America is the largest rodent in the world. Next in size among rodents is the beaver.

Ques.: Is there any way to make crow meat palatable?

Ans.: Crow can be made more palatable by soaking in salt water overnight before cooking.

Ques.: Can tea be grown in Virginia?

Ans.: Tea can probably be grown in Virginia as a garden curiosity or anywhere that camellias can be grown. It has been grown successfully in North Carolina, but required irrigation even when planted in low ground and would not be commercially profitable because of the labor involved.



Ques.: Are there any regulations for anyone raising game birds or game animals?

Ans.: Yes, anyone raising game birds or animals is required to secure a game breeders permit from the Commission of Game and Inland Fisheries. It is issued for the fiscal year and costs \$5.

Ques.: Can you tell me whether pheasants are stocked by the Game Commission?

Ans.: The Commission does not release or stock pheasants in Virginia because it has been found that they will not survive here for any length of time in the wild.

Ques.: Are there any other animals besides the opossum which pretend to be dead in order to escape their enemies?

Ans.: Yes, there are a number of other animals which feign death instead of fleeing or fighting back, among them the fox, the dingo, or wild dog, owls, buzzards, the African lizard, the giant African toad, and the hog-nosed snake.

Ques.: Is it true that waterfowl are being dyed as well as banded for identification?

Ans.: Yes, during recent months, personnel of the Game and Fresh Water Fish Commission of Florida have been engaged in banding and dyeing ducks on the northwestern shore of Lake Okeechobee. A red dye has been used which makes the birds easily identifiable, both from the air during aerial census work and on the ground during routine observations. So far, 523 bluewing teal and smaller numbers of shovellers, pintails, blacks, scaup and ringnecks have been dyed.

Ques.: Is it necessary to have a regular fishing license in addition to a dipping license for shad?

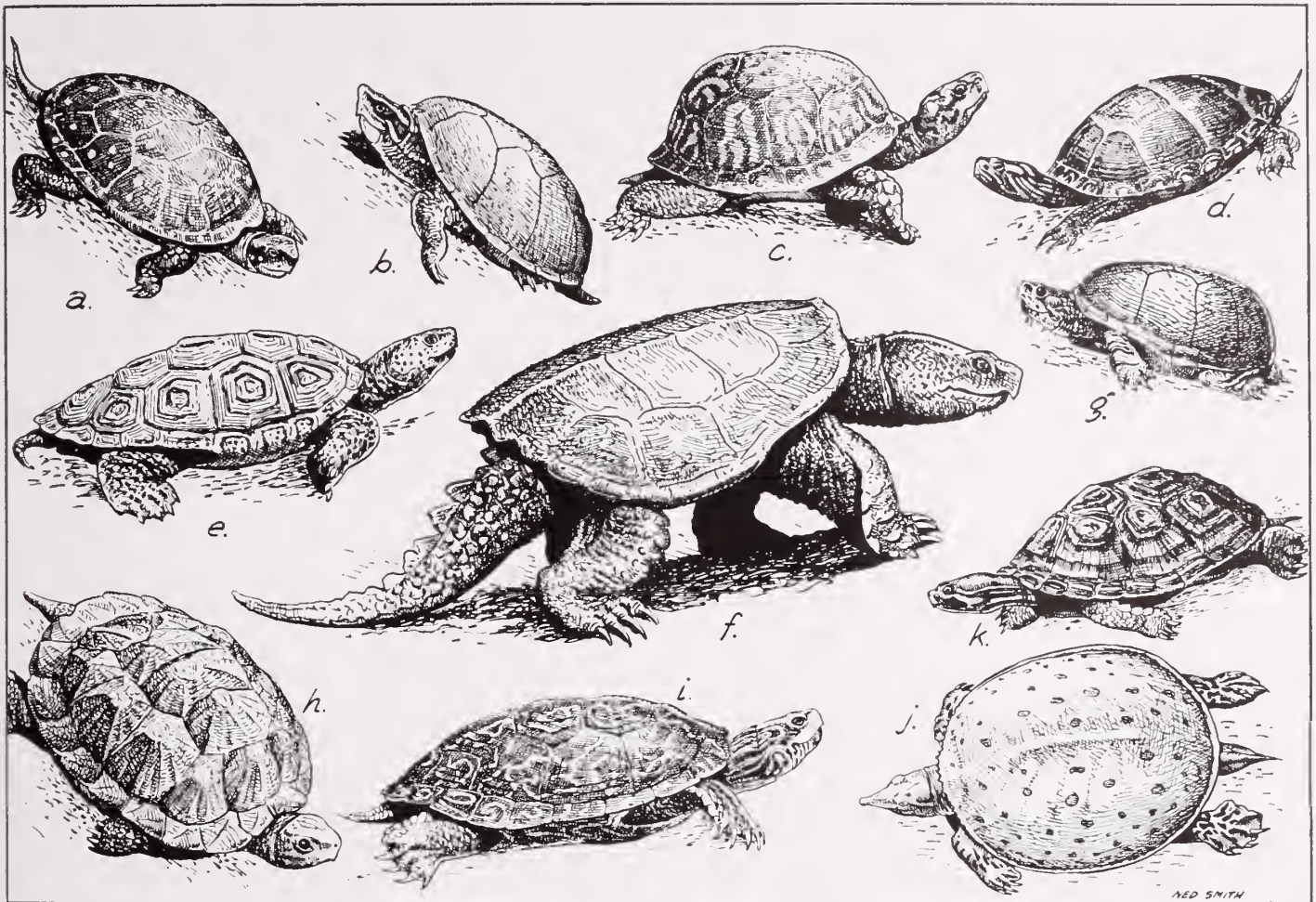
Ans.: No, only the dipping permit is necessary. A dip net permit is not a license to fish as is the license for angling, but is a permit to take fish in inland waters by means other than angling. This permit entitles the permittee to take shad, herring and mullet and an angling license is not required. However, the permit is not a statewide dip net license and is good only in the county in which it is used.

Ques.: I am interested in securing some large fish for stocking my pond. Are there any commercial fish hatcheries in Virginia from which I might secure them?

Ans.: There is no commercial fish hatchery in Virginia. If you know of anyone who has a private pond and wishes to sell some game fish he can do so by first obtaining a permit from the Commission of Game and Inland Fisheries. Your Commission can furnish fish for stocking only in waters that are open to public fishing. You may get fish free of charge from the U. S. Department of the Interior, Fish and Wildlife Service, Peachtree-Seventh Building, Atlanta 5, Georgia.

Ques.: Is it necessary to have a hunting license to catch bull frogs?

Ans.: You must have a hunting license to take bull frogs off your premises and it will be necessary to have permission as well to hunt them on land not under your control.



Common Virginia Turtles

a. Spotted turtles (*Clemmys guttata*) live in small pools and ponds where they feed underwater on such small animals as tapoles, insects and crayfish. Hardy and gentle, they make good pets, but they must have enough water to submerge.

b. Musk turtles (*Sternotherus odoratus*) are named for their unpleasant odor. They have no value as human food, and sometimes damage fish nets, but are useful scavengers.

c. Box turtles (*Terrapene carolina*) have lower shells hinged at the front and back so they can be tightly closed—unless the turtle is too well fed. They eat small animals and plants and make good garden pets.

d. Painted turtles (*Chrysemys picta*) are helpful scavengers which eat small animals, dead or alive, and water plants, but must swallow their food underwater.

e. Diamond-back terrapin (*Malaclemys centrata*), gourmets' favorite, live in the salt and brackish water of marshes and estuaries, are good divers and swimmers, hibernate in the mud. Snails, small crabs, and shreds of marsh grass are typical foods always eaten underwater.

f. The common snapping turtle (*Chelydra serpentina*), our one dangerous chelonian, with its powerful snapping jaws, lurks in muddy ponds and rivers. It

may kill young ducks and game fish and is itself good to eat.

g. Mud turtles (*Kinosternon sububrum*) are bottom crawlers which prefer shallow water, but are good swimmers and agile on land. They eat fish, insects and worms.

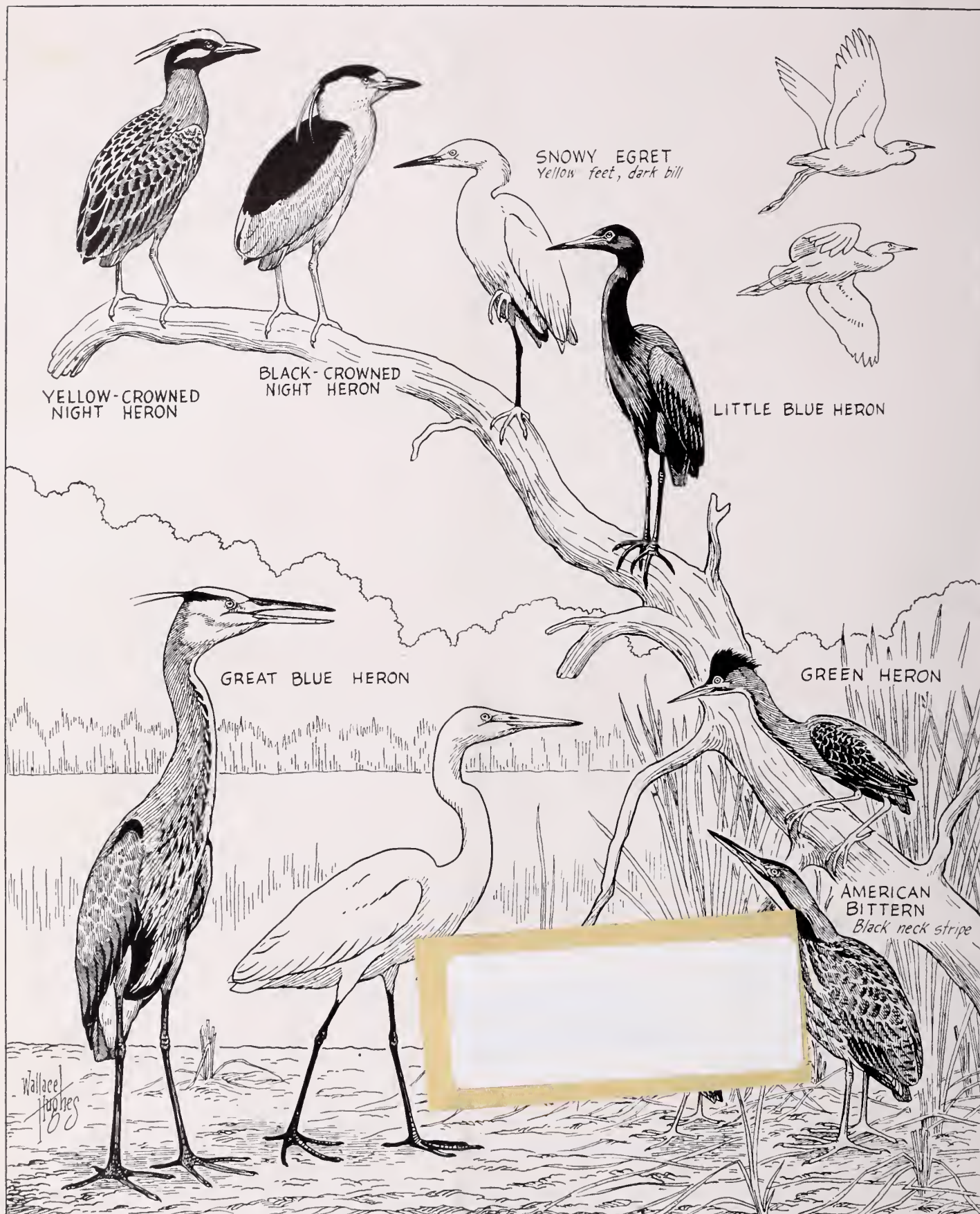
h. Wood turtles (*Clemmys insculpta*) with their "sculptured" upper shells do much traveling on land and feed on fruits, berries, leaves, mushrooms, insects, snails, carrion. Their flesh is good to eat and they are useful in gardens.

i. Map turtles (*Graptemys geographia*) abound in marshes and shallow bays and prefer plant-grown soft bottoms to swift clear streams, are good swimmers, but slow on land.

j. The spiny soft-shelled turtle (*Trionyx spiniferus*), with its flexible leathery shell, is able to stay underwater for hours, spends much time buried up to its head, floating on the surface of calm water, or basking on banks.

k. The river terrapin (*Pseudomys floridana*) is a highland turtle which inhabits ponds and rivers and eats algae, but comparatively little is known of its habits.

—D. U. T.



VIRGINIA WADING BIRDS